

6 Ameritech?

7 A. I have some knowledge of that.

8 Q. In fact, the FCC describes SBC's proposal  
9 for that in paragraph 31. Is that correct?

10 A. I'm taking just a second to look at that,  
11 if that's okay.

12 Q. Take your time.

13 (Brief pause in the proceedings.)

14 A. Yes, they have described that process.

15 Q. And they describe the process as being  
16 akin to ordering unbundled network elements,  
17 including submitting a local service request. Is  
18 that right?

19 A. I think all they're just saying is we're  
20 using the LSR process for ordering the individual  
21 end user services through the Pronto architecture,  
22 and I think they're just noting that that's the

1 process that CLECs are already using today to order  
2 unbundled network elements. I think that's a  
3 convenience, in a sense, because you're not having  
4 to do -- to order the wholesale Broadband Service  
5 under a totally separate process.

6 Q. And a CLEC to order it has to order two  
7 separate subloops from SBC/Ameritech, the subloop  
8 between the central office and the remote terminal  
9 and then the subloop between the remote terminal and  
10 the customer's premise. Is that right?

11 A. Well, basically -- not exactly like that.  
12 What's happening is a single LSR provides both of  
13 those parts of the network. They're established as  
14 two separate pieces for billing purposes, but it's  
15 not like a CLEC has to say I would like, you know,  
16 one of these and one of these, as I recall. I  
17 believe they just say I would like to have this LSR  
18 provide this DSL service to this end user.

19 Ms. Chapman could elaborate on that or  
20 correct any misstatements that I might be making  
21 about that ordering process.

22 Q. Thank you.

1           A.     She's very good about all that.

2           Q.     Thank you, Mr. Lube.

3                     Mr. Lube, one of the contentions of my  
4     client, Sprint, in this case is that the Broadband  
5     offering cannot be individualized to a particular  
6     CLEC's liking. I understand there is some language  
7     from the SBC -- or from the Project Pronto Order  
8     where SBC has said, hey, CLECs, we will be able to  
9     individualize your offerings for you. When can we  
10    expect to see those types of offerings to be  
11    available for CLECs?

12          A.     I believe there's two parts to the answer  
13    to that question as well. Even with the existing  
14    ADSL type service that can be provided over the  
15    Broadband or through the Broadband Service, there  
16    are various speed combinations that a particular  
17    CLEC may choose to offer and market to its  
18    customers, and any of those speed combinations  
19    available with that ADLU card for ADSL are available

20 right now --

21 Q. The current card --

22 A. -- for CLECs.

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1 Q. Excuse me for interrupting, but that's the  
2 current card that Ameritech is installing in the  
3 remote terminals. Is that correct?

4 A. Yes, because it's the card that's  
5 currently available from the manufacturer.

6 Q. Okay. So that card that's currently  
7 available, you're stating that there may be some  
8 speed differences that a CLEC can order using the  
9 installed system that is coming on line.

10 A. Well, not that there may be but that there  
11 are. There are different speed combinations, and a  
12 given CLEC, as I might have mentioned just in  
13 passing yesterday, a given CLEC who wants to offer  
14 or market various combinations to its end users

15 would establish a profile for each of those  
16 combinations and then apply that profile on an  
17 as-sold to their end user basis to each DSL service  
18 that they order.

19 Q. But right now that's just ADSL service.  
20 Correct?

21 A. That's the only card that's available  
22 right now.

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1 Q. Okay.

2 A. Now the second part to your question  
3 related to -- I believe relates to future functions  
4 and features that may be made available in future  
5 cards, and, as I explained very thoroughly I believe  
6 yesterday, SBC is looking or it will be -- is now  
7 and will continue to be looking at making those  
8 other features and functions available, but with the  
9 consideration in mind for making sure that there's

10 no harm done to the capacity of the platform or the  
11 service quality of any other end users that are  
12 using that shared facility.

13 Q. Do you have any schedule for when  
14 deployment of future cards will be accomplished?

15 A. I do not have any of that information with  
16 me now, and that really is dependent on the  
17 manufacturer, and I know, frankly, their schedules  
18 change, and they're at the manufacturer's ability.  
19 It's not something that Ameritech Illinois  
20 establishes for the vendor.

21 Q. Three months? Six months? Nine months?  
22 Do you have any idea?

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1 A. I don't have any specific information  
2 right this minute on any particular card type.

3 Q. One of the other options that a CLEC can  
4 do besides buying the Broadband Service offering is

5 to collocate at a remote terminal and purchase a  
6 subloop from Ameritech. Is that correct?

7 A. Yes, sir, that's correct.

8 Q. Okay. And you describe that as an  
9 alternative to line sharing for the CLEC. Is that  
10 right?

11 A. No, sir.

12 Q. Okay. So it's not a line sharing type  
13 arrangement. Right?

14 A. No, sir, it's not an alternative to line  
15 sharing. It's one manner in which you may achieve  
16 line sharing, and what I mean by that is if you  
17 collocate a stand-alone DSLAM in a remote terminal  
18 and you use a copper subloop out to the end user's  
19 premises, you will be line sharing over that copper  
20 subloop, and, in fact, the Line Sharing Order  
21 specifically addresses that type of line sharing.

22 Q. Okay. Or the CLEC can purchase the entire

1 subloop? Is that another option?

2 A. When you say the entire subloop, do you  
3 mean the entire loop all the way back to the central  
4 office?

5 Q. Well, maybe we're talking passed each  
6 other a little bit here. When the CLEC collocates  
7 at the remote terminal, do they purchase from the  
8 remote terminal to the customer premise an entire  
9 subloop or do they only purchase a frequency portion  
10 of that subloop?

11 A. Well, that would depend on if they are  
12 line sharing, and I forget whether you qualified  
13 that as part of your question, but if they're line  
14 sharing, they would be purchasing an HFPL on that  
15 subloop. If they're not share lining, they would be  
16 purchasing the entire subloop.

17 MR. SCHIFMAN: Nothing further, Your Honor.

18 EXAMINER WOODS: Ms. Hamill?

19 MS. HAMILL: No, not from me.

20 EXAMINER WOODS: Mr. Harvey?

21 MR. HARVEY: No.

22 EXAMINER WOODS: Take a minute for redirect?



1           MR. BINNIG: I think we're ready for our  
2   redirect now, if you'd like.

3           EXAMINER WOODS: Okay.

4                               REDIRECT EXAMINATION

5           BY MR. BINNIG:

6           Q.     Mr. Lube, do you recall that Mr. Bowen  
7   asked you yesterday some questions about an  
8   Ameritech Accessible Letter that I think was marked  
9   Rhythms Lube Cross Exhibit 1, which is the  
10   Accessible Letter dated May 24, 2000?

11          A.     Yes, sir.

12          Q.     And do you recall that Mr. Bowen called  
13   your attention to a portion of that letter that  
14   appeared on the top of the second page I believe  
15   that referred to pending issues before the FCC, and  
16   I believe your testimony was that you believed that  
17   those pending issues referred to the waiver request  
18   that was then pending where SBC had requested waiver

19 of the merger conditions with respect to its ILEC  
20 ownerships of NGDLC line cards and OCDs?

21 A. Yes, that is correct.

22 Q. Has the Commission -- the FCC issued an

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1 order with respect to that waiver request?

2 A. Yes, they have. They issued an order I  
3 believe it was September the 8th of 2000.

4 Q. And, briefly, what did the FCC do in that  
5 order?

6 A. Very briefly, the FCC did grant the waiver  
7 for the SBC ILECs to own the ADLU cards and the  
8 NGDLC and to own the OCDs in the central office, and  
9 that order was consistent with our Broadband Service  
10 offering, so no change was required as a result of  
11 that order.

12 Q. Let's go to one of the hypotheticals that  
13 Mr. Bowen asked you. Do you recall several

14 questions Mr. Bowen asked you about cross-talk  
15 issues yesterday?

16 A. Yes, I recall that discussion.

17 Q. And one of the hypotheticals he posited to  
18 you involved a CLEC that was providing SDSL service  
19 to an end user customer over a copper loop of 19,000  
20 feet in length. Do you recall that?

21 A. Yes, I do recall that hypothetical.

22 Q. Is SDSL a line sharing service?

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1 A. No, it is not. In fact, even the FCC has  
2 recognized in its Line Sharing Order that SDSL is  
3 not a type of DSL that you can line share with. The  
4 SDSL frequencies go all the way into the voice band,  
5 so it's not possible.

6 Q. And I believe the portion of your  
7 testimony that Mr. Bowen had raised that  
8 hypothetical with was where you had addressed the

9 ability of CLECs to continue line sharing over  
10 copper loops in a Project Pronto environment. Is  
11 that correct?

12 A. Yes, that's correct.

13 Q. Now, let's go to the issue of the  
14 technical problems that you discuss in your  
15 testimony relating to CLEC ownership of line cards  
16 for Project Pronto NGDLCs, and do you recall  
17 Mr. Bowen asking you a series of questions relating  
18 to this issue?

19 A. Yes, I do.

20 Q. And one of the questions Mr. Bowen asked  
21 you I think had to do with -- I think he provided  
22 you a hypothetical whereby a CLEC would want to use

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1 a line card, an ADLU card manufactured by Alcatel at  
2 some point that might be different from the ADLU  
3 cards that AADS was interested in using for DSL

4 service that it was providing. Do you recall that  
5 question?

6 A. Yes, I think I do recall that question.

7 Q. In answering that question, what did you  
8 assume regarding the ownership of those line cards,  
9 either the line card that was being used for AADS to  
10 provide service or the line card that was being used  
11 for the CLEC to provide service?

12 A. In that discussion I was assuming that the  
13 ILEC owned the line card; in other words, Ameritech  
14 Illinois owned the line card.

15 Q. So in your answer were you essentially  
16 describing what you've discussed with Mr. Schiffman  
17 briefly here today, that is the Broadband Service  
18 offerings and SBC's plan to make other Broadband  
19 Services offerings available when they become  
20 available from the manufacturer?

21 A. Yes, that's correct.

22 Q. Now, Mr. Bowen also asked you several

1     hypotheticals about the creation of new UNEs by the  
2     Illinois Commission. Do you recall those questions?

3           A.     Yes, I do.

4           Q.     What is your understanding of a state  
5     commission's ability to order the unbundling of a  
6     network element that an ILEC has not deployed in its  
7     network?

8           MR. SCHIFMAN: Objection. It calls for a legal  
9     conclusion.

10          MR. BINNIG: I asked for his understanding.

11          EXAMINER WOODS: Answer.

12          A.     Well, my understanding is our unbundling  
13     obligations relate to our existing network. If it's  
14     a type of technology or equipment that Ameritech  
15     Illinois has not even deployed in its network, that  
16     it would not be appropriate for that to be defined  
17     as an unbundled network element by the Commission.

18          Q.     Now, Mr. Bowen also asked you a number of  
19     questions relating to SBC's retirement of copper  
20     loop plant. Do you recall those questions?

21          A.     Yes, I do.

22          Q.     And one of the questions I think Mr. Bowen

1 asked you was whether Ameritech or SBC had provided  
2 a guarantee that it would not retire copper loop  
3 after September 2003. Do you recall that question?

4 A. Yes, I do.

5 Q. Does SBC continue to add new copper loop  
6 plant to its network as we sit here today?

7 A. Yes, it does, and, in fact, the decisions  
8 to add copper versus fiber are made by engineering  
9 people on a case-by-case or job-by-job basis, and  
10 there are instances where copper is still the most  
11 economical type of facility to deploy.

12 Q. Is your expectation that in September 2003  
13 that SBC will be continuing to add new copper loop  
14 plant to its network?

15 A. It is still possible at that point in time  
16 that that would be the most economical choice in  
17 specific situations.

18           Q.     Mr. Bowen also asked you a number of  
19     questions about Project Pronto deployment where he  
20     asked you to assume that the Project Pronto network  
21     was being built based on an expected penetration  
22     rate for DSL services of 20 percent. Do you recall

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1     that hypothetical?

2           A.     I do recall that hypothetical assumption  
3     of 20 percent take rate.

4           Q.     Okay. I'd like you to make the same  
5     assumption today, Mr. Lube. Based on that assumed  
6     take rate, could Ameritech Illinois simply remove  
7     from service all of its copper loop plant in October  
8     2003?

9           A.     Not at all.

10          Q.     Why is that?

11          A.     If you assume for a moment that there's a  
12     20 percent take rate on DSL services, which means



13 that there's a potential for that many of the end  
14 users to be served by the Project Pronto platform,  
15 that still leaves 80 percent of the customers or end  
16 users out there who have not taken DSL who are  
17 receiving POTS service, and many of those POTS  
18 services today are provided over copper loops or all  
19 copper loops, and there is simply no capacity in the  
20 Project Pronto architecture to make a wholesale  
21 replacement of all of those POTS services that are  
22 provided over copper today, so all of that copper

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1 could not possibly be taken out.

2 Q. So, Mr. Lube, would you expect customers  
3 that are served by copper plant today for POTS  
4 service who don't elect to take DSL services, would  
5 you expect them to continue to be served by that  
6 copper loop plant in September 2003?

7 A. I would expect that to be the case for

8 many customers. It would not necessarily be the  
9 case for all customers due to other required  
10 rearrangements in the plant, in the loop plant, but  
11 I would expect that to be the case for very many.

12 Q. Now, Mr. Bowen also asked you a number of  
13 questions, and I believe the Hearing Examiner  
14 followed up with a few questions, regarding your  
15 testimony that allowing CLECs to own line cards for  
16 the Project Pronto NGDLCs would increase the  
17 potential for capacity exhaust for those NGDLCs. Do  
18 you recall those questions?

19 A. Yes, and that capacity exhaust would occur  
20 because not being able to achieve higher utilization  
21 of the ports and the slots, you know, the card slots  
22 in the NGDLC remote terminals.

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1 Q. Okay. Now I believe that you testified  
2 yesterday that that capacity exhaust problem would

3 not exist if the incumbent, in this case Ameritech  
4 Illinois, owned the NGDLC line cards, and I'd like  
5 you to explain why that's the case. We have an  
6 easel here so Mr. Lube can draw an explanation,  
7 which I think would be helpful.

8 EXAMINER WOODS: Did you say weasel?

9 (Laughter)

10 MR. BINNIG: Easel, easel.

11 MS. HIGHTMAN: Do you have a better pen than you  
12 had in the last case?

13 MR. BINNIG: We hope so; we hope so.

14 THE WITNESS: And, Your Honor, I think the point  
15 that I'll be trying to show is that the potential  
16 for under-utilization of this equipment is a lot  
17 less with a single ILEC owning the cards than  
18 multiple CLECs owning the cards.

19 MR. BOWEN: Do I get to draw on recross?

20 THE WITNESS: If you use a different color on  
21 the same picture maybe.

22 MR. BINNIG: I think we have a few pads of

1 paper.

2 MR. BOWEN: Seriously, is this going to be an  
3 exhibit in some fashion?

4 MR. BINNIG: Well, it's for demonstrative  
5 purposes I think to help everyone understand. It's  
6 up to the Hearing Examiner.

7 MR. BOWEN: You're going to have to reduce it I  
8 think. The transcript will not make sense unless  
9 you reduce it and make it an exhibit.

10 MR. BINNIG: Well, we're not planning  
11 necessarily to offer it, but we'd be happy to. We  
12 do have reduced versions already available.

13 EXAMINER WOODS: If the point is simply that the  
14 ILEC is going to be adding line cards as needed to  
15 where there might only be two ports or attachments  
16 empty at any one time as opposed to letting the  
17 CLECs have 15 cards, each of which may have 2  
18 unused, and 30 is more than 2, then I understand  
19 that. If that's the point, I understand that, but  
20 the point I was making is that as the testimony  
21 stood yesterday, I think before the question was

22 asked, it was obvious that even the ILEC can come up

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1 somewhat short of full utilization of a card. So I  
2 mean I think I understand the point.

3 THE WITNESS: And that is correct, Your Honor.  
4 It's just multiplied -- the problem is multiplied by  
5 the number of CLECs.

6 EXAMINER WOODS: I understand that.

7 MS. HIGHTMAN: No pictures?

8 EXAMINER WOODS: No.

9 MR. BINNIG: I tried, Carrie. I tried.

10 Q. I think I may only have one more question,  
11 Mr. Lube, and this concerns some of the discussion  
12 you had this morning with Mr. Schiffman where you  
13 were talking about universal digital loop carriers  
14 or UDLCs. Do you recall that discussion?

15 A. Yes, sir.

16 Q. Is there a single specified path between

17 an end user premise and a central office for the  
18 data stream or data service when that data service  
19 is provisioned over a UDLC?

20 A. No, there is not. In fact, as I've  
21 described in my prefiled testimony, there is not a  
22 specific path for a DSL service through the ATM

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1 multiplexed bit stream, and I guess my understanding  
2 of Mr. Schiffman's question that I was answering was  
3 that he was referring to the path that would be used  
4 for an unbundled loop that's provided -- over which  
5 that CLEC could provide POTS services because he had  
6 referred to switches, and switches provide POTS, so  
7 that's the contrast I was trying to explain at that  
8 time.

9 MR. BINNIG: No further questions at this time,  
10 Your Honor.

11 EXAMINATION

12 BY EXAMINER WOODS:

13 Q. In terms of the various ADLU cards, are  
14 you committing Ameritech to purchase, inventory, and  
15 provision every single ADLU card manufactured by  
16 Alcatel as they come out?

17 A. The ADLU card specifically is for ADSL.  
18 If you're referring to future cards that handle  
19 other flavors --

20 Q. Yes.

21 A. -- of the DSL, Your Honor, SBC is  
22 committing to work in every way it can to be able to

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1 utilize every type of technology that Alcatel  
2 creates or manufactures for this platform. The only  
3 limitations or conditions that could apply, as I  
4 have explained, is that if they come out with a card  
5 that is technically capable of doing some new kind  
6 of DSL service and that service is such a bandwidth

7 hog that for us to deploy it it would completely  
8 affect or -- affect in a bad way all the other  
9 services, DSL services that are using the Project  
10 Pronto platform, then we would choose to not use  
11 that card. I mean it's technically feasible to use  
12 it because it works, it talks, or it passes data,  
13 but if it does so at the expense of the platform,  
14 you know, its capacity and other users on it, then  
15 it would not be appropriate we believe for that to  
16 be deployed in that platform, that type of card.

17 Q. And what bandwidth does it go from a  
18 piglet to a hog?

19 (Laughter)

20 A. Well, actually, we don't know, and we're  
21 studying that because the first things that need to  
22 be looked at, and I think Mr. Bowen and I had a

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1 chance to talk about these yesterday, are constant



2 bit rate type quality of service classes and  
3 permanent virtual paths which themselves occupy  
4 dedicated chunks of the bandwidth that's in that  
5 shared pipe, and, you know, I think we're trying  
6 very hard to figure out how to engineer and not harm  
7 the capacity of the platform and affect other users'  
8 services.

9 Q. To your knowledge, what different types of  
10 cards is Alcatel manufacturing at this time?

11 A. Attachment JPL-2 to my rebuttal, there's a  
12 part of that response that Alcatel gave us that  
13 refers to cards that they have current plans to  
14 develop.

15 Q. No, the question was now. Now, to your  
16 knowledge, is Alcatel supporting anything but ADSL  
17 in their cards?

18 A. It supports a TDM-based HDSL which  
19 operates on the voice side of the platform, not on  
20 the DSL or ATM-formatted side of the platform. They  
21 offer that today. There are other forms that  
22 they're working on but not available today.

1           We are including Alcatel and other vendors  
2   in our collaborative sessions, and the first one, as  
3   I mentioned yesterday, is Tuesday, October 24th, and  
4   we hope to, you know, push on them, as the CLECs  
5   will too I'm sure, you know, for other developments.

6           MR. BOWEN: Thank you, Your Honor.

7                           RECROSS EXAMINATION

8           BY MR. BOWEN:

9           Q.     Let me start with talking about bandwidth  
10   hogs first.

11          A.     I'm sorry. Excuse me?

12          Q.     I want to talk about bandwidth hogs some  
13   more. I'm getting the sense from your answer that  
14   this is -- that all of a sudden bandwidth is some  
15   kind of scarce resource in a brand-new architecture  
16   like Pronto. You can't mean that, right? That  
17   can't be what you're saying.

18          A.     The technology has capabilities for a lot  
19   of bandwidth, but what we're deploying, what we're  
20   spending the cash on today to deploy, certainly has

21 a specific bandwidth limitation. There are other  
22 things that can be done with that platform, other

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1 expenditures that we can make, if they're prudent  
2 for us to make, that can expand that capacity. We  
3 talked about one yesterday, wavelength division  
4 multiplexing. So I guess my reference, Mr. Bowen,  
5 is to what we have paid for or what we're paying for  
6 right now to deploy in the network today.

7 Q. Okay. Well, the basic point of Pronto is  
8 to try and deliver a lot more bandwidth to  
9 customers. Isn't that fair?

10 A. Well, more than they've had in the past.

11 Q. Right. Okay, and isn't the good thing  
12 about fiber that you just keeping bumping the  
13 electronics and the same fibers carry more and more  
14 width?

15 A. Mr. Bowen, I believe we'll be working

16 toward the same ends to try to utilize this platform  
17 to the most prudent extent that we can.

18 Q. Okay.

19 A. We have a wholesale service that we want  
20 to sell. We would not be building this platform if  
21 we did not want to sell this wholesale service to  
22 data carriers.

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1 Q. Well, I don't want to get into the service  
2 /UNE dispute again this morning, but let's just  
3 agree that we want to get more bandwidth from you  
4 and you want to sell us more bandwidth. Is that  
5 fair?

6 A. We can start with that assumption.

7 Q. Okay. All right. If we tell you I've got  
8 customers that, you know, that want to take services  
9 that require the following amounts of bandwidth and  
10 the total of all those demands is greater than the

11 current capacity the way you've configured it of an  
12 Alcatel 2000, you can take actions to grow the  
13 capacity, as we talked about yesterday. Right?

14 A. Yes, we can -- I mean physically we can  
15 make additional expenditures to grow capacities or  
16 to enhance capabilities.

17 Q. Okay.

18 A. Before some of those expenditures occur I  
19 believe it would be prudent for us as a business to  
20 understand what commitments or willingness to pay  
21 for different features and functions that the CLEC  
22 has so that we can recover our costs for that

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1 investment.

2 Q. That was my next question. If a CLEC  
3 tells you, as Rhythms will tell you, we are happy to  
4 pay TELRIC-based rates for whatever we get from you,  
5 that should satisfy that concern. Right?

6           A.     Well, that and some indication of how much  
7     you would intend to need, some kind of demand  
8     forecast commitment. It's a matter of if it costs  
9     us another \$50 million to deploy a new widget in  
10    some RTs to provide the service that you're  
11    specifically asking for and it turns out that you  
12    really only were going to sell five of those, you  
13    know, five customers, again, I think it's back to  
14    just a normal business arrangement or relationship  
15    that we would have that you would say this is what I  
16    need, and we're willing to work with you on stuff  
17    like that. This is what I need, this is my  
18    willingness to pay at reasonable rates, you know,  
19    based on TELRIC pricing concepts.

20           Q.     Okay.

21           A.     And this is the demand that I expect to  
22    have, and if I don't get it, you know, this is a

1 commitment that I'm making to you so that you won't  
2 be stuck with a lot of stranded investment out there  
3 because we couldn't sell it.

4 Q. Okay. Well, if Rhythms or other companies  
5 come to you and say I've got a bunch of customers  
6 that need a lot of bandwidth and I'll pay you  
7 TELRIC- based prices, that's a good thing for SBC,  
8 right? You get more money. You get more revenues,  
9 and you're covering your costs, right?

10 A. That's why we're offering the services.

11 Q. So we don't have to talk about harming the  
12 capacity of your fiber systems or bandwidth hogs.  
13 Bandwidth hogs are good, right? You sell more  
14 services.

15 A. Well, deployment decisions are based on  
16 everything in the world from capital availability to  
17 commitment to sell services. It would all be taken  
18 into consideration.

19 Q. Don't you want to sell more services?

20 A. Absolutely.

21 Q. And more bandwidth requires more services  
22 -- services of higher bandwidth probably command

1 higher prices, right?

2 A. This is why we're looking at these other  
3 possibilities or these other features such as CBR.

4 Q. So you should be welcoming bandwidth hogs.  
5 Is that right?

6 A. I'm not going to go so far as to say that.  
7 You have to understand that we want to sell  
8 services. We want it to be the services that the  
9 retail carriers want to sell, but I cannot make an  
10 absolute commitment that any bandwidth you want to  
11 sell that we can accommodate. I cannot do that.  
12 The network, no matter how great the technology is  
13 and it continues to become, it has limits. It has  
14 limitations.

15 Q. Okay. Now, you were listing the cards in  
16 response to Your Honor's questions that are  
17 available from Alcatel right now, but I think you  
18 forgot one. Isn't there right now an Alcatel ISDN  
19 card that will also support IDSL?



20           A.     Yes, also on the POTS side of the system.

21     That's correct.

22           Q.     All right.  Now let's come back to the

410

1     redirect from your counsel this morning.

2                   One of the questions Mr. Binnig asked you  
3     was -- again, the context here is my pointing out to  
4     you in the May 24th Accessible Letter the  
5     reservation of rights language that says SBC can  
6     modify or withdraw this offering at will.  Do you  
7     recall that?

8           MR. BINNIG:  And I'll object to the  
9     characterization of that.

10          MR. BOWEN:  I can reread the sentence.

11          Q.     Do you recall the footnote I was talking  
12     about?

13          A.     Could I look at the footnote again,  
14     please?

15 Q. Sure.

16 I'm going to hand the witness Rhythms  
17 Cross Lube Number 1. For context why don't you just  
18 read that last sentence again for the record, Mr.  
19 Lube. It's at the bottom of a bunch of the pages,  
20 the last sentence of the footnote.

21 A. "The Broadband Wholesale Service,  
22 including rates, terms and conditions, is subject to

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1 change, modification, or withdrawal by SBC ILECs, in  
2 their sole discretion, in whole or in part, either  
3 before or after the service becomes operational as a  
4 result of the matters now pending before the FCC."  
5 Those last words are critical.

6 Q. Okay, and then your counsel asked you a  
7 question so has the FCC acted, and you said yes,  
8 they have.

9 A. Yes, we have; or they have. Excuse me.

10 Q. So my answer is, okay, I understand that;  
11 I agree with that. So what's the implication of  
12 that? That the footnote now is no longer operative?

13 A. Based on how I read this footnote and the  
14 fact that the FCC has ordered that the ILEC --  
15 excuse me -- the SBC ILECs are allowed to own that  
16 equipment that we have been talking about, that that  
17 would eliminate the need to alter or modify or  
18 withdraw, in whole or in part, the service because  
19 of that reason.

20 Q. Okay. Now, you're aware that there's a  
21 later Accessible Letter, are you not, on the same  
22 topic?

412

1 A. Yes, I am.

2 Q. Let me read you a sentence out of that.  
3 This is the September 6, 2000 Accessible Letter.  
4 Have you seen that?

5 A. I have seen it, yes, sir.

6 Q. Okay. Let me read the first page, the  
7 last paragraph, the first sentence, for the record.  
8 I'm quoting here. "The SBC ILECs reserve the right  
9 to change, modify, and/or withdraw their Broadband  
10 Service and, in their sole discretion, in whole or  
11 in part, as a result of regulatory developments,  
12 including but not limited to action or inaction on  
13 the matters pending before the FCC." Do you recall  
14 that language?

15 A. I'm not sure I had actually read that in  
16 that Accessible Letter.

17 Q. Okay. Let me show it to you. This is  
18 attached to Ms. Chapman's testimony as Schedule  
19 CAC-4, Mr. Lube, the last paragraph of that first  
20 page.

21 A. Yes, I do see that.

22 Q. Okay. Did I read that correctly?

1           A.     I believe this is what you read.

2           Q.     Okay.

3           A.     The transcript would probably --

4           Q.     I tried to --

5           A.     -- show that.

6           Q.     Okay.

7                   Well, there's a difference between those  
8 two sentences, right? The footnote in the May 24th  
9 letter just references the actions of the FCC, but  
10 the later language in the more recent Accessible  
11 Letter talks about actions including but not limited  
12 to the FCC actions. Right? Do you need to see it  
13 again to answer the question?

14          A.     No, no, sir. I understand what you're  
15 asking. I believe that the language -- as I have  
16 just read that with you, I believe the language in  
17 the second letter recognizes that regulatory bodies  
18 besides the FCC can place restrictions or make  
19 determinations that are not economically beneficial  
20 to SBC in terms of, you know, such as line card  
21 ownership, and I believe that that reworded sentence  
22 would probably be recognizing that type of

1 situation.

2 Q. Okay.

3 A. I believe Ms. Chapman could probably add  
4 to what I'm saying on that, but that would be my  
5 network take on what that says.

6 Q. So you might take your ball and go home.

7 A. Well, as I mentioned yesterday, we have to  
8 evaluate the economics of any regulatory decision  
9 that affects the appropriateness of us rolling out  
10 this voluntary platform.

11 Q. But put a different way, am I correct that  
12 the most recent Accessible Letter I just referenced  
13 you to still maintains an absolute near lateral  
14 right on your part to modify or withdraw the  
15 Broadband Service offering?

16 MR. BINNIG: Object to the extent it calls for a  
17 legal conclusion.

18 MR. BOWEN: I'm asking for a nonlegal conclusion

19 here.

20 A. Okay. Actually, I don't have an opinion  
21 about the circumstances under which SBC's ILECs may  
22 or may not be able to do that. Ms. Chapman might be

415

1 able to address that. I don't know.

2 Q. Okay. All right.

3 Do you recall questions from your counsel  
4 about our SDSL type of hypothetical discussion  
5 yesterday?

6 A. Yes, I do.

7 Q. Well, I'm not sure I understood the  
8 context of your answers to your counsel's redirect  
9 questions. I was asking -- I thought what you were  
10 saying is when we roll Project Pronto, we won't take  
11 any loops out of service so existing services can  
12 continue, line shared or not. Wasn't that what you  
13 were saying?

14           A.     Well, yes, I was saying that, but I think  
15     the point was that SDSL is not a line shared  
16     service.

17           Q.     I understand that, but didn't we have a  
18     discussion that then talked about how, line shared  
19     or not, the deployment of DSL transceivers in the  
20     field at RTs could, in fact, affect the performance  
21     of existing services that were deployed on all  
22     copper, including SDSL?

416

1           A.     Yes, we did have that discussion  
2     yesterday.

3           Q.     Okay. And you're still agreeing that,  
4     again, whether or not the current service deployed  
5     by a CLEC on an all copper loop is or is not line  
6     shared, that the deployment of Pronto and  
7     transceivers at the RTs can affect the performance  
8     of those services. Is that right?



9           A.     Yes. As I explained, that would be true  
10 whether it's Project Pronto or any other CLEC's  
11 voluntarily collocated DSLAM in an RT.

12           Q.     Okay. Now your counsel also asked you  
13 about new UNEs. This is -- and do you recall that  
14 question and your answers?

15           A.     About this Commission?

16           Q.     Yes.

17           A.     Finding new UNEs or ordering new UNEs?

18           Q.     Yes.

19           A.     Yes, I do remember.

20           Q.     Okay. Well, let me point your attention  
21 to the waiver order, paragraph 30 again. Now I'm  
22 going to read you two sentences. If you need a copy

417

1 of that, maybe you still have it up there from your  
2 counsel. I don't know.

3           A.     Yes, I do.

4           Q.     Okay. I want you to turn with me to  
5 paragraph 30. I'm quoting from the FCC here in  
6 paragraph 30, the third sentence. "We take no  
7 position on whether SBC's Broadband offering is  
8 subjects to Sections 251-252 or any other provisions  
9 of the Act. Such issues may be raised in state  
10 proceedings relating to the proposed amendments to  
11 the interconnection agreements." Do you see that?

12          A.     I do see that.

13          Q.     You're not disagreeing with that part of  
14 the FCC's statement about this Commission's ability  
15 to find new UNEs, are you?

16          A.     Oh, no, I'm not disagreeing with that. I  
17 mean this is an instance where the FCC has taken no  
18 position on whether something is a UNE. However, at  
19 the same time, the FCC has taken a position on  
20 packet switching, and to the extent that the  
21 Broadband Service utilizes packet switching, I  
22 believe the FCC has made a determination in that

1 instance.

2 Q. And we talked about that yesterday, didn't  
3 we?

4 A. Yes, we did.

5 Q. Okay.

6 Let's talk about whether or not if you  
7 were to want to retire the copper plant now being  
8 served, whether you could or not. Do you recall  
9 that question from your counsel?

10 A. Yes.

11 Q. In other words, would it be even feasible  
12 to roll all existing services in distribution areas  
13 to the Pronto architecture? Can we say it that way?

14 A. That was part of the essence of that  
15 discussion.

16 Q. And you said there wasn't enough capacity  
17 to do that on the current Pronto architecture.  
18 Correct?

19 A. That's correct. Project Pronto is not  
20 even deployed in all distribution areas to begin  
21 with.

22 Q. Well, okay. Let's just take one Project

1 Pronto RT as an example. All right? I know it's  
2 not deployed every place, and it never will be  
3 deployed every place, right? That's not the  
4 architecture at all.

5 A. That's correct.

6 Q. Okay. So let's take one RT. The capacity  
7 of an Alcatel LiteSpan 2000 is what? 2,000 lines  
8 roughly? 2,000 voice grade lines.

9 A. I believe that's correct.

10 Q. Okay. All right. Now, each of those  
11 voice grade lines occupies a 64 kilobit channel on  
12 the time division multiplexed fiber going back to  
13 the office. Is that right?

14 A. That's correct.

15 Q. Okay. And if that -- if you had that  
16 Alcatel LiteSpan at full capacity, meaning there  
17 were 2,000 voice grade customers -- strike that.

18           If you currently had 2,000 voice grade  
19 customers being served from SAIs that this RT was  
20 not going to serve from Pronto, are you with me so  
21 far?

22       A.     If we had 2,000 customers -- I'm sorry.

420

1     Can you repeat that?

2       Q.     Right. Right now we're on an all copper  
3 distribution area route.

4       A.     Okay.

5       Q.     And we've got four SAIs, all right?  
6 Serving four distribution areas. Are you with me?

7       A.     Yes.

8       Q.     Okay. And the total of all the customers  
9 being served from those four SAIs is 2,000 voice  
10 customers. Okay?

11      A.     Okay.

12      Q.     Now you want to put a LiteSpan 2000 RT out

13 there that will also serve those four same SAIs.

14 All right?

15 A. Okay.

16 Q. This is kind of the limit case, right,  
17 because, you know, you would be deploying an RT that  
18 would already be maximized with voice services, so  
19 you probably wouldn't do that, but let's assume you  
20 do. You're going to deploy an RT that can handle  
21 2,000 customers, and, in fact, you have 2,000 voice  
22 customers right now. Okay?

421

1 A. Okay.

2 Q. Now, you're going to take the voice  
3 traffic back to the office on the TDM fiber. Right?

4 A. If it's on the Pronto architecture?

5 Q. Yes.

6 A. Yes.

7 Q. So if you wanted to re-home all the copper

8 served customers, all those 2,000 customers, you  
9 would have enough line cards to do that because the  
10 capacity of the RT is 2,000 voice customers. Right?

11 A. If that's all the number of customers that  
12 you have in those SAIs today collectively, that's  
13 right. You would have that capacity, but SAIs are  
14 not limited to -- well, in fact, I think you had  
15 four SAIs in your example.

16 Q. Right.

17 A. An SAI is not limited -- each SAI is not  
18 limited to a fourth of the capacity of that RT.

19 Q. I understand that. I just want to assume  
20 that in total the SAIs that subtend the RT total  
21 2,000 customers, 2,000 voice customers.

22 MR. BINNIG: And the hypothetical also is four

422

1 SAIs, right?

2 MR. BOWEN: I don't really care, frankly. It

3 can be two; it can be three; it can be four.

4 MR. BINNIG: Can it be twenty?

5 MR. BOWEN: No.

6 (Laughter)

7 MR. BINNIG: I'm trying to get to reality here,  
8 but that's okay.

9 Q. Isn't this reality, Mr. Lube? Don't you  
10 have three to five SAIs subtending each RT in your  
11 architecture?

12 A. Yes, but each one of those SAIs is not  
13 limited to 3- or 400 customers.

14 Q. I understand that. I want you to assume  
15 with me that there are four, and the total number of  
16 customers served by all four of those together is  
17 2,000 voice customers. Okay?

18 A. Okay. I understand the hypothetical  
19 situation that you are describing.

20 Q. Okay. That would maximum out the line  
21 card ports on the field side of the Alcatel DLC.  
22 Right?



1 A. Yes.

2 Q. Okay. Now, each of those voice grade  
3 pairs takes a 64 kilobit channel coming across the  
4 fiber, the TDM side of the fiber, right?

5 A. That's correct.

6 Q. Okay. Now, that's going to be an OC3,  
7 right?

8 A. Yes, it is.

9 Q. Okay. Are there, in fact, 672 voice grade  
10 channels on a DS3?

11 A. I haven't multiplied that out lately, but  
12 I believe that's correct.

13 Q. All right. Let's do it. How many 64K  
14 channels are there in a T1?

15 A. 24.

16 Q. And how many T1s in a DS3?

17 A. 28.

18 Q. And what's 24 times 28?

19 A. I suspect that's 672.

20 Q. Okay. Let's assume that it is.

21 A. Oh, it is. I trust you on that.

22 Q. Okay. How many DS3s in an OC3?

424

1 A. There's four.

2 Q. And what's --

3 A. I'm sorry. Let me take that back. Gosh,  
4 let me think. I am having a mental block. I think  
5 it's three. I think it's three DS3s.

6 Q. A DS3 runs at 45 megabits a second, right?

7 A. And it's 155 on an OC3, so it's three.

8 Q. Okay.

9 A. Not four. I was incorrect.

10 Q. Okay. And what's 672 times 3?

11 A. It's a bunch.

12 Q. It's more than 2,000, isn't it?

13 A. Oh, yes, it is.

14 Q. Okay. So you could fit all 2,000 of the  
15 existing voice grade customers, 64 K channels, on a  
16 fully configured Alcatel 2000 DLC across a single

17 TDM fiber you plan to deploy anyway, right?

18 A. I could have agreed with you directly on  
19 that premise.

20 Q. Okay. So you could roll all the existing  
21 voice customers that would be served by an Alcatel  
22 2000 onto the Project Pronto architecture and retire

425

1 that copper, couldn't you?

2 MR. BINNIG: Wait. Are we still in hypothetical  
3 land here or are you talking about the actual  
4 architecture now?

5 MR. BOWEN: I'm talking about the actual Pronto  
6 architecture.

7 MR. BINNIG: Okay.

8 A. Okay. In that very hypothetical  
9 assumption that you made that there's a grand total  
10 of only 2,000 customers in the four SAIs combined,  
11 then, yes, you could, but each SAI can serve more

12 than 500 customers.

13 Q. Uh-huh.

14 A. So, in reality, there could be many more  
15 POTS customers out there than can be rolled to the  
16 capacity that's in the remote terminal equipment and  
17 the fiber.

18 Q. And you can simply subdivide SAIs and add  
19 more RTs to be able to serve whatever number of  
20 customers you want to serve, right? There's no  
21 technical limitation on how many RTs you can place  
22 to serve the Pronto architecture, is there?

426

1 A. Let me answer you this way. I do not  
2 dispute the fact that with unlimited expenditures  
3 that we couldn't add enough additional Pronto  
4 capacity to do that. I was just saying with the  
5 deployed capacity, there is no way to wholesale roll  
6 every single copper customer onto the Pronto

7 architecture.

8 Q. All right. Finally, the UDLC question and  
9 the path to the premises that your counsel asked and  
10 that Mr. Schiffman had discussed with you. Now I'm  
11 confused by a couple of your answers. You've heard  
12 of GR303, right?

13 A. Yes, I have.

14 Q. That's a specification, is it not, for how  
15 a DLC in the remote terminal talks to the central  
16 office equipment, especially the switch?

17 A. I think that's a reasonable  
18 characterization.

19 Q. Okay. And isn't there a correspondence  
20 between GR303 compliance and what we call NGDLC  
21 equipment?

22 A. NGDLC equipment is capable of delivering

427

1 services per the GR303 specification, but that same

2 NGDLC equipment can also simultaneously deliver  
3 services according to the two prior Bellcore  
4 specifications, which is TR008 and TR57.

5 Q. Okay.

6 A. And TR57 is UDLC.

7 Q. And TR008 is integrated digital loop  
8 carrier, right?

9 A. It's one form of IDLC; that's correct.

10 Q. Okay. So let me understand then what  
11 you're saying. You've agreed that there isn't a  
12 specific path to the premises for the data services.  
13 I want to get that straight first. What you mean by  
14 that is you've agreed to rolling NGDLC in Project  
15 Pronto. I mean it's not a trick question. You did  
16 say that to Mr. Schiffman, right?

17 A. That I'm rolling --

18 Q. All the Pronto DLCs will be NGDLC.

19 A. Yes.

20 Q. Okay. All right. And your discussion  
21 about specific paths, I think I heard you say to  
22 Mr. Binnig, focused on the TDM or the POTS side of

1 the transport connection. Is that right?

2 A. When I was answering the original question  
3 from Mr. Schiffman, he was referring to a path in his  
4 questions, as I recall those questions, from the  
5 switch to the end user, and so that's why I believed  
6 he was talking about a POTS type service, so that's  
7 why I was referring or my answers were referring to  
8 the TDM side of the architecture.

9 Q. So all those three specifications, GR303,  
10 TR008, and TR57, they deal with the TDM side of that  
11 DLC architecture. Is that right?

12 A. That's correct.

13 Q. Okay, and in your deployment of Pronto for  
14 DSL services, the ADSL bits will travel across a  
15 separate fiber using ATM technology to the OCD,  
16 right?

17 A. That's correct.

18 Q. And so they don't get involved with  
19 integrated digital loop carrier or NGDLC, GR303, or  
20 universal DLC issues at all.

21 A. No, they do not.

22 MR. BOWEN: Okay. I understand.

429

1 That's all I have. Thank you, Your Honor.

2 MR. BINNIG: I think just one real brief line of  
3 questions.

4 REDIRECT EXAMINATION

5 BY MR. BINNIG:

6 Q. Do you have Rhythms Lube Cross Exhibit 1?

7 A. I don't believe I have that. I think  
8 Mr. Bowen took that back.

9 MR. BOWEN: It was my only copy. I apologize.  
10 I'm required to keep my exhibits close to hand.

11 MR. BINNIG: I'm just trying to establish that  
12 there's nothing hidden going on here.

13 Q. If you look at the second page of Rhythms  
14 Cross Exhibit 1, which is the May 24th Accessible  
15 Letter, does that have the exact same language in



16 terms of including the sentence that says including  
17 but not limited to that appears in the September 8th  
18 or September 6th Accessible Letter that was attached  
19 to Ms. Chapman's testimony?

20 A. I'm skimming the page.

21 Q. The first paragraph at the top of the  
22 page.

430

1 A. Oh, first paragraph at the top. Okay.

2 (Brief pause in the proceedings.)

3 Yes. Within this paragraph there's a  
4 sentence that reads: "The SBC ILECs reserve the  
5 right to change, modify and/or withdraw their  
6 Broadband Service, in their sole discretion, in  
7 whole or in part, as a result of regulatory  
8 developments, including but not limited to action or  
9 inaction on the matters pending before the FCC",  
10 which I believe is the same sentence that I read

11 from the later Accessible Letter.

12 MR. BINNIG: I think that's all I had.

13 EXAMINER WOODS: Okay. Thank you, Mr. Lube.

14 THE WITNESS: Thank you, Your Honor.

15 (Witness excused.)

16 EXAMINER WOODS: Let's take a break while we  
17 change witnesses.

18 (Whereupon a short recess was  
19 taken, during which time  
20 Rhythms Cross Smallwood  
21 Exhibit 7 was marked for  
22 identification by the Court

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1 Reporter.)

2 EXAMINER WOODS: We'll go back on the record.

3 I don't believe you were here for the mass  
4 swearing. Would you stand and raise your right  
5 hand.